radiography is a requirement of the particular material specification.

(2) For those specifications in which no filler material is used in the welding process, the ultrasonic examination as required by item S–6 in ASTM A–376 shall be certified as having been met for service above 800 °F.

TABLE 56.60–2(A)—ADOPTED SPECIFICATIONS NOT LISTED IN THE ASME CODE

ASTM specifications	Source of allowable stress	Notes
FERROUS MATERIALS [1]		
Bar stock:		
A276 (Grades 304–A, 304L–A, 310–A, 316–A, 316L–A, 321–A, 347–A, and 348–A).	See footnote 4.	(4).
A575 and A576 (Grades 1010–1030)	See footnote 2	(2,3).
NONFERROUS MATERIALS		
Bar stock:		
B16 (soft and half hard tempers).	See footnote 5	(5,7).
B21 (alloys A, B, and C).	See footnote 8	(8).
B124:		
Alloy 377	See footnotes 5 and 9.	(5,9).
Alloy 464	See footnote 8	(8,10).
Alloy 655	See footnote 11	(11).
Alloy 642	See footnote 12	(7,12).
Alloy 630	See footnote 13	(7,13).
Alloy 485	See footnote 8	(8,10).
Forgings:		
B283 (forging brass)	See footnotes 5 and 9.	(5 9).
Castings:		
B26	See footnotes 5, 14, and 15.	(5,14,15).
B85	See footnotes 5, 14, and 15.	(5,14,15).

[1] For limitations in use refer to § 56.60–5.

[2] Allowable stresses shall be the same as those listed in UCS23 of section VIII of the ASME Code for SA–675 material of equivalent tensile strength.

[3] Physical testing shall be performed as for material manufactured to ASME Specification SA–675, except that the bend test shall not be required.

[4] Allowable stresses shall be the same as those listed in UCS23 of section VIII of the ASME Code for the corresponding SA–182 material.

[5] Limited to air and hydraulic service with a maximum design temperature of 150 °F. The material must not be used for salt water service or other fluids that may cause dezincification or stress corrosion cracking.

[6] [Reserved]

[7] An ammonia vapor test, in accordance with ASTM B 858M (incorporated by reference, see § 56.01–2), shall be performed on a representative model of each finished product design.

[8] Allowable stresses shall be the same as those listed in UNF23 of section VIII of the ASME Code for SB–171, naval brass.

[9] An ammonia vapor test, in accordance with ASTM B 858 (incorporated by reference, see § 56.01–2), shall be performed on a representative model for each finished product design. Tension tests shall be performed to determine tensile strength, yield strength, and elongation. Minimum values shall be those listed in table 3 of ASTM B283.

[10] Physical testing, including mercurous nitrate test, shall be performed as for material manufactured to ASTM B21.

[11] Physical testing shall be performed as for material manufactured to ASTM B96. Allowable stresses shall be the same as those listed in UNF23 of section VIII of the ASME Code for SB–96 and shall be limited to a maximum allowable temperature of 212 °F.

[12] Physical testing shall be performed as for material manufactured to ASTM B171, alloy D. Allowable stresses shall be the same as those listed in UNF23 of section VIII of the ASME Code for SB–171, aluminum bronze D.

[13] Physical testing shall be performed as for material manufactured to ASTM B171, alloy E. Allowable stresses shall be the same as those listed in UNF23 of section VIII of the ASME Code for SB–171, aluminum bronze, alloy E.

[14] Tension tests shall be performed to determine tensile strength, yield strength, and elongation. Minimum values shall be those listed in table X–2 of ASTM B85.

[15] Those alloys with a maximum copper content of 0.6 percent or less shall be acceptable under this specification. Cast aluminum shall not be welded or brazed.

Note: This Table 56.60–2(a) is a listing of adopted bar stock and nonferrous forging and casting specifications not listed in the ASME Code. Particular attention should be given to the supplementary testing requirements and service limitations contained in the footnotes.

[CGFR 68–82, 33 FR 18843, Dec. 18, 1968, as amended by CGFR 69–127, 35 FR 9978, June 17, 1970; CGD 72–104R, 37 FR 14233, July 18, 1972; CGD 73–248, 39 FR 30839, Aug. 26, 1974; CGD 73–254, 40 FR 40165, Sept. 2, 1975; CGD 77–140, 54 FR 40612, Oct. 2, 1989; CGD 95–012, 60 FR 48050, Sept. 18, 1995; CGD 95–027, 61 FR 26001, May 23, 1996; CGD 95–028, 62 FR 51201, Sept. 30, 1997; USCG–1998–4442, 63 FR 52190, Sept. 30, 1998; USCG–1999–5151, 64 FR 67180, Dec. 1, 1999]

§ 56.60–3 Ferrous materials.

(a) Ferrous pipe used for salt water service must be protected against corrosion by hotdip galvanizing or by the use of extra heavy schedule material.

(b) (Reproduces 123.2.3(c)). Carbon or alloy steel having a carbon content of more than 0.35 percent may not be used in welded construction or be shaped by oxygen cutting process or other thermal cutting process.

[CGD 73–254, 40 FR 40165, Sept. 2, 1975]

§ 56.60–5 Steel (High temperature applications).

(a) (Reproduces 123.2.3(a).) Upon prolonged exposure to temperatures above 775 °F., the carbide phase of plain carbon steel, plain nickel alloy steel, carbon-manganese alloy steel, manganese-vanadium alloy steel, and carbon-silicon steel may be converted to graphite.

(b) (Reproduces 123.2.3(b).) Upon prolonged exposure to temperatures above 875 °F., the carbide phase of alloy steels, such as carbon-molybdenum, manganese-molybdenum-vanadium, manganese-chromium-vanadium and